

CLAIMS

1. (Previously Presented) A system comprising:
 - a digitizer capable of collecting three-dimensional data about an object;
 - an orientation fixture to automatically reposition the object from a first orientation to a second orientation to expose a first aspect and a second aspect of the object relative to the digitizer; and
 - a controller to coordinate the automatic repositioning with data capture by the digitizer;

wherein the orientation fixture and the digitizer are physically independent units without a predefined relative position.
2. (Original) The system of claim 1 wherein at least one of the digitizer and the orientation fixture is capable of automatically locating the relative position of the other.
3. (Original) The system of claim 1 wherein the digitizer is capable of automatic calibration.
4. (Original) The system of claim 1 further comprising:
 - a host to process the three-dimensional data to render a three-dimensional representation of at least a portion of the object.
5. (Original) The system of claim 4 wherein the host comprises:
 - a distributed network interface, the interface to transmit the three-dimensional representation to a remote user node.
6. (Original) The system of claim 4 wherein the digitizer communicates with the host over a wireless link.

7. (Original) The system of claim 1 wherein the digitizer communicates with the orientation fixture over a wireless link.
8. (Original) The system of claim 1 wherein the orientation fixture comprises:
a self contained power source.
9. (Original) The system of claim 1 wherein the digitizer comprises:
a self contained power source.
10. (Original) The system of claim 1 wherein the orientation fixture comprises:
a distinctive feature that permits the digitizer to acquire the orientation fixture by scanning an area for the distinctive feature.
11. (Original) The system of claim 1 wherein the orientation fixture comprises:
a localized energy source that permits the digitizer to acquire the orientation fixture.
12. (Original) The system of claim 1 wherein the orientation fixture is a turntable.
13. (Original) A system comprising:
a digitizer having a linear image sensor to collect three-dimensional data about an object;
an orientation fixture to automatically reposition the object from a first orientation to a second orientation to expose a first aspect and a second aspect of the object relative to the digitizer, wherein the digitizer and orientation fixture are integrally coupled as a single unit; and
a controller to coordinate the automatic repositioning with data capture by the digitizer.

14. (Original) The system of claim 13 wherein the digitizer is capable of automatic calibration.
15. (Original) The system of claim 13 comprising:
a host to process the three-dimensional data to render a three-dimensional representation of at least a portion of the object.
16. (Original) The system of claim 15 wherein the host comprises:
a distributed network interface, the interface to transmit the three-dimensional representation to a remote node.
17. (Original) The system of claim 15 wherein the single unit communicates with the host over a wireless link.
18. (Original) The system of claim 13 wherein the single unit comprises:
a self contained power source.
19. (Original) The system of claim 13 wherein the orientation fixture is a turntable.
20. (Original) A method comprising:
receiving a request over a distributed network to authorize operation of a lockable image capture system at a node remote from the image capture system and coupled to the distributed network; and
sending an authorization data to the image capture system across the distributed network such that the image capture system is unlocked and enabled to capture an image.
21. (Original) The method of claim 20 wherein the image capture system performs three-dimensional imaging.

22. (Original) The method of claim 20 further comprising:
reprogramming a reconfigurable array of logic of the image capture system
from a remote node.

23. (Original) A method comprising:
capturing image data in an image capture device coupled to a distributed
network;
preventing access to the image data by a local user until an authorization is
received; and
allowing access to the image data upon receipt of the authorization from a
remote node on the distributed network.

24. (Original) The method of claim 23 wherein preventing access comprises:
encrypting the image data with an algorithm that can be decrypted with
information from the remote node.

25. (Original) The method of claim 24 wherein preventing access further comprises:
disabling local storage of the encrypted image data.

26. (Original) The method of 24 further comprising:
uploading the encrypted image data to the remote node.

27. (Previously Presented) A system comprising:
a digitizer capable of collecting three-dimensional data about an object;
an orientation fixture to automatically reposition the object from a first
orientation to a second orientation to expose a first aspect and a second aspect of the
object relative to the digitizer;

a controller to coordinate the automatic repositioning with data collection by the digitizer; and

a data analyzer to identify points of interest in the data collected wherein the digitizer and orientation fixture automatically rescan a portion of the object corresponding to a point of interest identified and a three-dimensional model of a portion of the object is adjusted to improve quality of data previously captured corresponding to the point of interest based on the rescan.

28. (Original) The system of claim 27 wherein the rescan is conducted at a higher resolution than a resolution of an original scan.

29. (Previously Presented) A system comprising:

a digitizer capable of collecting three-dimensional data about an object;
an orientation fixture to automatically reposition the object from a first orientation to a second orientation to expose a first aspect and a second aspect of the object relative to the digitizer;

a controller to coordinate the automatic repositioning with data collection by the digitizer; and

a data analyzer to identify points of interest in the data collected wherein the digitizer and orientation fixture automatically rescan a portion of the object corresponding to a point of interest identified and a three-dimensional model of a portion of the object is adjusted based on the rescan wherein the rescan is conducted using a different capture method.

30. (Previously Presented) A system comprising:

a digitizer capable of collecting three-dimensional data about an object;
an orientation fixture to automatically reposition the object from a first

orientation to a second orientation to expose a first aspect and a second aspect of the object relative to the digitizer;

a controller to coordinate the automatic repositioning with data capture by the digitizer;

a host to process the three-dimensional data to render a three-dimensional representation of at least a portion of the object, the host having a distributed network interface, the interface to transmit the three-dimensional representation to a remote user node; and

wherein the orientation fixture and the digitizer are physically independent units.